

# AMERICAN BEECH

## *Fagus grandifolia* Ehrh.

OTHER COMMON NAMES: Beech.

FORM: Usually 50-60 feet tall, diameter 2-3 feet, may reach a height of 120 feet with a diameter of 4 1/2 feet; in the open, trunk short and thick, breaks up a few feet above ground into numerous spreading limbs and slender, somewhat drooping branches, forming a broad round-topped head; in the forest, trunk often tall, slender, free of branches, with a narrow compact crown.

BARK: Very close, smooth, light, gray, mottled with dark spots.

TWIGS: Slender, at first dark yellow to gray, hairy; later smooth, zigzag, marked by bud scale scars.

LEAVES: Alternate, simple, ovate, 2 1/2-6 inches long, 1-3 inches wide, stiff, leathery with tapering apex, sharp-toothed margin, light green above, greenish-yellow below.

FLOWERS: Open when the leaves are about one-third grown; monoecious; staminate in many-flowered drooping heads, borne on slender peduncles about 2 inches long; pistillate flowers in clusters of 2 on short woolly pedicels with an involucre of scales clothed with long white hairs subtended by deciduous, pink bracts.

FRUIT: A stalked, prickly, thick-walled burr, about 3/4 inch long; opens in the autumn by 4 valves and frees 2 triangular, lustrous, brown nuts.

WINTER BUDS: Alternate; terminal bud present, about 5 times as long as wide, slender, sharp-pointed, conical, usually smooth, covered by scales.

WOOD: With broad medullary rays with narrow ones intervening; hard, strong, tough, not durable, difficult to season, light red in color.

USES: Pulp, wildlife, aesthetics.

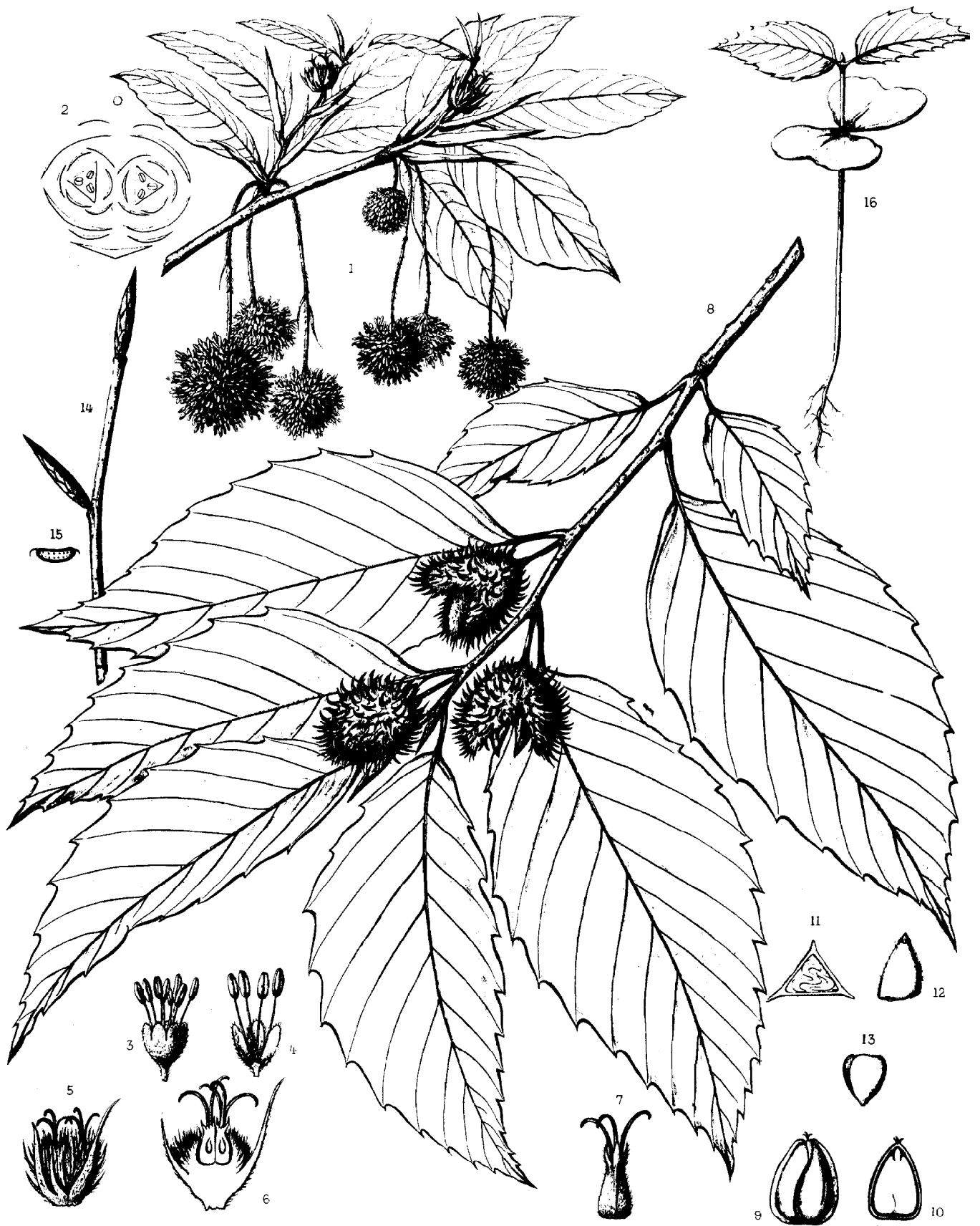
HABITAT: Prefers rich moist bottom-lands, occurs also on gravelly slopes and rich uplands.

DISTINGUISHING CHARACTERISTICS: Close, smooth, light gray bark; prickly, stalked fruit with triangular seeds; long, slender, sharp-pointed reddish-brown buds.

DISTRIBUTION IN ALABAMA: Pretty well over the state; most abundant in northern part.

### EXPLANATION OF PLATE

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|---|--|
| 1. A flowering branch   | 9. A nut   |
| 2. Diagram of a pistillate inflorescence                                    | 10. Vertical section of a nut  |
| 3. A staminate flower   | 11. Cross section of a nut   |
| 4. Vertical section of a staminate flower                                   | 12. A seed with the hairy dissepiment attached at its apex and slightly separated below, and the abortive ovules |
| 5. A cluster of pistillate flowers with their involucre                     | 13. An embryo  |
| 6. Vertical section of a cluster of pistillate flowers with their involucre | 14. A winter branch  |
| 7. A pistillate flower  | 15. A leaf scar  |
| 8. A fruiting branch  | 16. A seedling plant with cotyledons and young leaves  |



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